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Gerrit Bleumer

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EXAMINER

KUCAB, JAMIE R

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/690,012	Applicant(s) BLEUMER, GERRIT	
	Examiner JAMIE KUCAB	Art Unit 3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 C.F.R. §1.114

1. A request for continued examination ("RCE") under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 28, 2008 has been entered.

Acknowledgements

2. In accordance with the RCE above, claims 1 and 20-26 are currently pending.
3. This Office action is given Paper No. 20081217 for reference purposes only.
4. Based on a comparison of the PGPub 20040117314 A1 with Applicant's originally submitted specification, the PGPub appears to be a fair and accurate record of the Applicant's specification. Therefore, if necessary any references in this action to Applicant's specification refer to paragraph numbers in the PGPub.

Claim Objections

5. Claims 20-26 are objected to because of the following informalities: where Applicant recites, "A method as claimed in claim 1", it appears that Applicant intends to recite -- The method of claim 1 further comprising -- or similar. For purposes of

comparison with the prior art, the Examiner is taking it as such. Appropriate clarification or correction is required.

6. Claims 1, 20, and 22-25 are objected to because of the following informalities: the claims do not follow the convention of separating distinct elements/steps of the claims with line spacings or line indentations. Per MPEP 608.01(i), "... Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation." For example, claim 1 recites the additional distinct steps of "using a cryptographic algorithm of a second type...", "... generating different respective outputs," "...operating on said input set...", and "...operating on the same input set..." which are not delineated per MPEP 608.01(i). Claim 22 contains at least four distinct steps ("storing...", "accessing...", "storing...", and "accessing"); however, the claim as presented in Applicant's amendment contains only a single line indentation. Note that the two claims addressed above are only examples, and that appropriate correction or clarification is required of claims 1, 20, and 22-25.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1 and 20-26 are rejected under 35 U.S.C. 101, because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent and recent Federal Circuit decisions, a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying

subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876). The process steps in claims 1 and 20-26 are not tied to another statutory class nor do they execute a transformation. Thus, they are non-statutory.

Claim Rejections - 35 USC § 112 1st Paragraph

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1 and 20-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The element “entering an input set ... said current communication with said second signature” (especially the portion “an entry designating whether said communication is for said first purpose or for said second purpose”) was not previously disclosed, nor could antecedent basis be found in the specification.

Claim Rejections - 35 USC § 112 2nd Paragraph

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1 and 20-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Regarding claim 1, it is unclear whether the steps of "using a first signature" and "operating on said input set for said current communication with said cryptographic algorithm of said first type to secure said current communication with said first signature" are the same step or distinct steps.

14. Regarding claim 1, it is unclear whether the steps of "using a second signature" and "operating on the same input set for said current communication with said cryptographic algorithm of said second type to secure said current communication with said second signature" are the same step or distinct steps.

15. Regarding claim 22, it is not clear how the implementation programs are contained within the logic modules. It is the Examiner's understanding that programs are typically made up of logic modules, rather than vice versa. Appropriate clarification or correction is required.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1, 20, 25, and 26, as understood by the Examiner in light of the above 112 2nd paragraph rejections, are rejected under 35 U.S.C. 103(a) as being unpatentable over Heiden et al. (6,438,530 hereinafter Heiden) in view of keytool - Key and Certificate Management Tool (hereinafter Keytool, see PTO-892 reference U).

18. Regarding claims 1, 20, and 26, Heiden discloses all the elements of the claimed invention including:

- a. for cryptographically securing a communication for a first purpose, using a first signature (postage stamps digital signature, C9 L43 - C10 L6);
- b. for cryptographically securing a communication for a second purpose, using a second signature (second digital signature, C9 L43 - C10 L6); and
- c. using a cryptographic algorithm of a first type to generate said first signature and using a cryptographic algorithm of a second type to generate said second signature and storing the algorithms in a memory of a postal security device (C4 L6-21, C9 L43 - C10 L6).

19. However, Heiden fails to explicitly disclose said cryptographic algorithms of said first type and said second type, for a same input set respectively generating different respective outputs; entering an input set into said host device for a current communication together with an entry designating whether said current communication is for said first purpose or for said second purpose; and storing a plurality of algorithms selected from the group consisting of signing algorithms and hash algorithms.

20. Keytool teaches cryptographic algorithms of a first type and a second type, for a same input set respectively generating different respective outputs (-selfcert, pg. 15-16);

entering an input set into said host device for a current communication together with an entry designating whether said current communication is for said first purpose or for said second purpose (-sigalg "SHA1withDSA" or -sigalg "MD5withRSA," pg. 12); and storing a plurality of algorithms selected from the group consisting of signing algorithms and hash algorithms (RSA and DSA, pg. 4).

21. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method of Heiden to include the multiple cryptographic algorithms of Keytool in order to achieve the predictable result of varying the level of security and speed of calculation for different signatures by changing algorithm type in order to more efficiently sign documents while maintaining appropriate security levels.

22. Regarding claim 25, Heiden further discloses a read-only memory of a postal security device (read-only software module), from a logic module outside of said postal security device (remote data center 40 in Fig. 1, C5 L40 - C6 L56) having access to said read-only memory (through a local or network modem / internet 30 connection, C5 L40-58) accessing a selected one of said algorithms upon a need for a communication for said first purpose and using said selected one of said algorithms as said cryptographic algorithm of said first type in said logic module to secure said communication for said first purpose; and from said logic module, accessing a selected different one of said algorithms from said read-only memory of said postal security device and, upon a need for a communication for said second purpose, securing said communication for said second purpose in said logic module using said selected different one of said algorithm as said cryptographic algorithm of said second type (C4 L6-21, C9 L43 - C10 L6).

23. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heiden / Keytool in view of Examiner's Official Notice.

24. Regarding claims 21 and 22, Heiden / Keytool discloses all the elements of the claimed invention including an implementation and separate logic modules (Fig. 2, C5 L40 - C6 L56) and generating signatures exclusively in logic modules (runs only on the PC, C4 L6-21). But Heiden / Keytool fails to explicitly disclose two implementation programs.

25. However, the Examiner takes Official Notice that it is old and well known in the art that it is desirable to separate different software functions into separate software programs in order to provide modularity. It would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Heiden / Keytool to include the separate programs of Examiner's Official Notice in order to provide modularity and better facilitate software updates.

26. Regarding claim 23, Heiden further discloses storing said first and second implementation programs in a postal security module (read-only software module) accessible by each of said first and second logic modules, and accessing said first implementation program in said postal security device (PC) from said first logic module upon a need for a communication for said first purpose and accessing said implementation program in said postal security device from said second logic module upon a need for a communication for said second purpose (Fig. 1, C4 L6-L21, C4 L46 - C5 L8, C5 L40 - C7 L64).

27. Regarding claim 24, Heiden further discloses wherein said first device contains a postal security device, and storing said first implementation program in a memory of said host device outside of said postal security device and storing said second implementation program in said memory of said host device outside of said postal security device (in the remote data center 40 in Fig. 1, C5 L40 - C6 L56), and accessing said first implementation program in said memory from said first logic module upon a need for a communication for said first purpose and accessing said second implementation program in said memory from said second logic module upon a need for a communication for said second purpose (through a local or network modem / internet 30 connection, C5 L40-58).

Examiner Note

28. The Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the Applicant, in preparing responses, to fully consider the reference in its entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claim Interpretation

29. As stated in the previous Office action (Paper No. 20080714) mailed July 28, 2008 the USPTO interprets claim limitations that contain statements such as "*if, may, might, can, could, when, potentially, possibly*", as optional language (this list of examples is not intended to be exhaustive). As matter of linguistic precision, **optional claim elements do not narrow claim limitations**, since they can always be omitted (*In re Johnston*, 77 USPQ2d 1788 (Fed. Circ. 2006)). They will be given less patentable weight, because language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.

30. As an example of the optional language addressed in the above paragraph, all of the elements of claim 1 can be interpreted as optional with the exception of the following

recitation: "entering an input set into said host device for a current communication together with an entry designating whether said current communication is for said first purpose or for said second purpose." In order to provide compact prosecution, the optional claim elements have been addressed in anticipation of an amendment reciting these optional elements as positive limitations.

31. As stated in the first action on the merits (Paper No. 20071130) mailed 12/10/07, functional recitations using the word "for" or other functional terms (*e.g.* "for cryptographically securing a communication for a first purpose" as recited in claim 1 and "for generating one of said first and second signatures, dependent on whether the communication is for said first purpose or said second purpose" in claim 4) have been considered but given less patentable weight¹ because they fail to add any steps and are thereby regarded as intended use language. To be especially clear, the Examiner has considered all claim limitations. However the recitation of the intended use of the claimed invention must result in additional steps. See *Bristol-Myers Squibb Co. v. Ben Venue Laboratories, Inc.*, 246 F.3d 1368, 1375-76, 58 USPQ2d 1508, 1513 (Fed. Cir. 2001) (Where the language in a method claim states only a purpose and intended result, the expression does not result in a manipulative difference in the steps of the claim.).

¹ See *e.g. In re Gulack*, 703 F.2d 1381, 217 USPQ 401, 404 (Fed. Cir. 1983)(stating that although all limitations must be considered, not all limitations are entitled to patentable weight).

Response to Arguments

32. Applicant's arguments with respect to the objections to claims 20-26 have been fully considered but they are not persuasive. The objections are not stylistic. As currently recited, claims 20-26 do not clearly set forth that claims 20-26 contain all the limitations of the respective parent claim, only that they are similar to the parent claim due to the use of the word "as." The objections to claims 20-26 are maintained. The Examiner does agree with Applicant that the use of the word "further" is not necessary.

33. Applicant's arguments with respect to the 112 2nd paragraph rejection of claim 20 due to the recitation "read-only" have been fully considered and are persuasive. This 112 2nd paragraph rejection of claim 20 has been withdrawn.

34. Applicant's arguments with respect to the 112 2nd paragraph rejections of claims 20, 23, 24, and 25 due to the recitation "upon a need for..." have been fully considered and are persuasive. These 112 2nd paragraph rejections of claims 20, 23, 24, and 25 have been withdrawn.

35. Applicant's arguments with respect to the 112 2nd paragraph rejections of claim 22 have been fully considered but they are not persuasive. Applicant alleges that the term "logic modules" is lexicographically defined in the specification. If this is the case, Applicant is invited to show where in the specification this lexicographic definition occurs. The 112 2nd paragraph rejections of claim 22 is maintained.

36. Applicant's argument with respect to the 112 2nd paragraph rejections of claim 24 due to lack of antecedent basis has been fully considered and is persuasive. The 112

2nd paragraph rejection of claims 24 due to lack of antecedent basis has been withdrawn.

37. Applicant's arguments with respect to the 103 rejections of claims 1 and 20-26 have been fully considered but they are not persuasive. See the above rejection for a detailed mapping of the prior art to the newly added limitation.

Conclusion

38. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jamie Kucab whose telephone number is 571-270-3025. The Examiner can normally be reached on Monday-Friday 9:30am-6:00pm EST.

39. Suggestions or examples of claim language provided by the Examiner in this Office Action are just that—suggestions or examples—and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that the claim is “allowed,” exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has not been addressed with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112 1st paragraph written description and enablement, §112 2nd paragraph indefiniteness, and §102 and §103 prior art). Therefore, any claim amendment that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

40. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK

/ANDREW J. FISCHER/
Supervisory Patent Examiner, Art Unit 3621